Remarks/Arguments:

The present invention is directed towards a non-woven web, which may be used as part of a porous gas diffusion substrate and a porous gas diffusion electrode for use in electrochemical devises, such as a fuel cell. The non-woven web is constructed from long fibres of greater than 5 mm in length oriented in *x*- and *y*-directions and short fibres of less than 3 mm in length, at least a proportion of which are oriented in the *z*- direction. The short fibres form 20% to 70% of the total weight of the fibres. The density of the web is from 0.1 g/cm^3 to 0.35 g/cm^3.

With this amendment, the Applicants have amended claims 1, 2, and 5-12. Claims 3 and 4 are cancelled. Claims 1 and 2 have been amended to incorporate the limitations of claim 4. Finally, the Applicants have amended pending claims 1, 2, and 5-12 to incorporate the language of "long fibres" and "short fibres," as suggested by the Examiner. With the amended wording, the applicants request confirmation that the claim objections have been overcome.

Claims 1-3 and 5-12 stand rejected under 35 U.S.C. § 102(b) as anticipated by Denton *et al.* (EP 0 791 974 A1). Denton *et al.* is directed to a catalytically active gas diffusion electrode comprising a nonwoven fibrous structure. As recognized by the Examiner, Denton *et al.* does not disclose a non-woven fibre web wherein the proportion of short fibres is no more than 70 wt%. Canceled claim 4 recited the limitation that the "plurality of shorter fibres is no more than 70% by weight of the total fibres." As stated above, claims 1 and 2 have been amended to incorporate the limitations of claim 4. Therefore, amended claim 1 now recites "wherein the plurality of short fibres is at least 20% and no more than 70% of the total weight of fibres," and amended claim 2 now recites "and from 20% to 70% by weight of short fibres."

Accordingly, the Applicants submit that the rejection under Section 102(b) based on Denton *et al.* has been rendered moot.

Canceled claim 4 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Denton *et al.* as applied to claims 1-3 and 5-12 in further view of Williams *et al.* (US Patent No. 5,935,884). The Applicants contend that amended claim 1 (which incorporates the limitations of canceled claim 4) is not subject to rejection under 35 U.S.C. § 103 for two reasons. First, the combination of Denton *et*

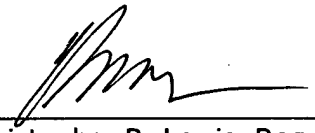
al. and Williams *et al.* does not result in the Applicants' invention as claimed. Second, one of ordinary skill in the art would not be motivated to apply the teachings in Williams *et al.* in combination with Denton *et al.* to solve the problem addressed by the Applicants' invention.

The combination of Denton *et al.* and Williams *et al.* does not result in the Applicants invention as claimed. The nonobvious differences between the invention claimed in claim 4 and Denton *et al.* have been discussed above. Denton *et al.* does not disclose nor suggest the claimed features of a small fibre (3 mm or less) content of 20% and no more than 70% of the total weight of the non-woven web. The wet-laid nonwoven nylon battery separator material of Williams *et al.* also fails to fill that void. For example, Williams *et al.* discloses a nylon 6.6 staple fibres and nylon 6 binder fibres, used in varying proportions. Col. 5, lines 27-33 state these fibres are of a length ranging from 12 - 19 mm. These fibres are not "short" fibres as defined in claims 1 and 2 of the present invention; they do not have an average length of less than 3 mm. Therefore, Denton *et al.* and Williams *et al.* does not make obvious the Applicants' invention because the combination fails to teach each and every claimed limitation. Under MPEP § 2142, in order to establish a *prima facie* case of obviousness, the references when combined must teach or suggest all of the claim limitations.

Moreover, one of ordinary skill in the art would not be motivated to apply the teachings in Williams *et al.* in combination with Denton *et al.* to solve the problem addressed by the Applicants' invention. The Office Action states that Williams *et al.* and Denton *et al.* are both directed to a nonwoven web for use in electrochemical devices. The nonwoven web in Williams *et al.*, however, is used as a separator in a nickel-cadmium battery whereas the nonwoven web in Denton *et al.* is used in a gas diffusion substrate, particularly a fuel cell gas diffusion substrate. A person of ordinary skill in the art would not consider the types of webs disclosed in Williams *et al.* to be useful in the invention of Denton *et al.*

Accordingly, for the foregoing reasons stated above, the Applicants submit that claims 1-2 and 5-12 are neither disclosed nor suggest alone or by the combination of Williams *et al.* and Denton *et al.* Therefore, the Applicants submit that pending claims 1 -2 and 5-12 are in condition for allowance and appreciate early notification to that effect.

Respectfully submitted,



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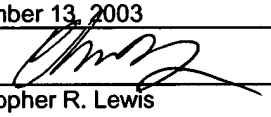

Christopher R. Lewis